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DERWENT-ACC-NO: 2001-307835
DERWENT-WEEK: 200132
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TITLE: Multiple purchase levels usage for electronic commerce over internet, by displaying purchase cost of selected product or service, determined in response to terms and conditions of selected graphical button

INVENTOR: CALDE, S; GOODWIN, K

PATENT-ASSIGNEE:

ASSIGNEE	CODE
RELEASENOW.COM INC	RELEN

PRIORITY-DATA: 1999US-0337409 (June 21, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
WO 200079417 A2	December 28, 2000	E	024	G06F017/00
AU 200057536 A	January 9, 2001		000	G06F017/00

DESIGNATED-STATES: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TZ UG ZW

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
WO 200079417A2	June 21, 2000	2000WO-US17027	
AU 200057536A	June 21, 2000	2000AU-0057536	
AU 200057536A		WO 200079417	Based on

INT-CL (IPC): G06 F 17/00

ABSTRACTED-PUB-NO: WO 200079417A
BASIC-ABSTRACT:

NOVELTY - Graphical representation of product or service is displayed in one of display area of clients (102,104) after receiving selection indication of graphical buttons associated with purchasing under different terms or conditions displayed in other display area. Terms and conditions under which the product or service has been selected are notified to e-commerce server (108) to determine purchase cost.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for apparatus for using multiple purchase levels for electronic commerce over internet.

USE - For selecting terms and conditions associated with purchase of products and services over internet.

ADVANTAGE - Request for product out of stock in product database can automatically trigger a request for additional products directly from manufacturing facilities.

Electronic commerce server has ability to execute procedures and functions written in preset languages to generate information used for displaying the web pages. Product type field specifically helps a person shop for types of products without having to know specific keywords associated with particular product.

DESCRIPTION OF DRAWING(S) - The figure shows the block diagram depicting the exemplary electronic commerce network.

Client computers 102,104

E-commerce server 108

CHOSEN-DRAWING: Dwg.1/5

TITLE-TERMS: MULTIPLE PURCHASE LEVEL ELECTRONIC DISPLAY PURCHASE COST SELECT PRODUCT SERVICE DETERMINE RESPOND TERM CONDITION SELECT GRAPHICAL BUTTON

DERWENT-CLASS: T01

EPI-CODES: T01-H07C5E; T01-H07C5S; T01-J05A;

SECONDARY-ACC-NO:
Non-CPI Secondary Accession Numbers: N2001-220325

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
28 December 2000 (28.12.2000)

PCT

(10) International Publication Number
WO 00/79417 A2

(51) International Patent Classification[7]: G06F 17/00

(21) International Application Number: PCT/US00/17027

(22) International Filing Date: 21 June 2000 (21.06.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
09/337,409 21 June 1999 (21.06.1999) US

(71) Applicant: RELEASENOW.COM, INC. [US/US]; 990 Commercial Street, San Carlos, CA 94070 (US).

(72) Inventors: GOODWIN, Kimberley; 856 Erie Street, Apt. F, Oakland, CA 94610 (US). CALDE, Steve; 1067 Pine Avenue, San Jose, CA 94306 (US).

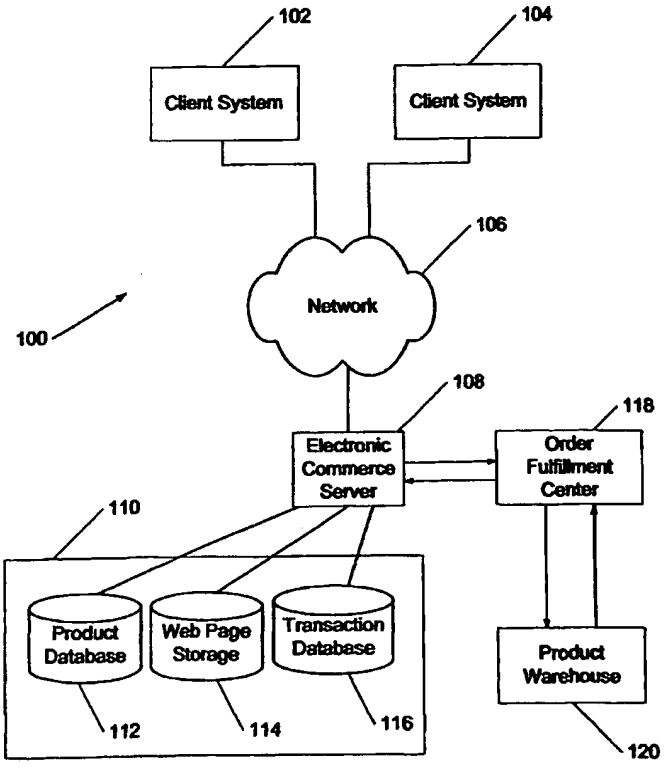
(74) Agents: GARRETT, Arthur, S. et al.; Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P., 1300 I Street, N.W., Washington, DC 20005-3315 (US).

(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR USING MULTIPLE PURCHASE LEVELS IN ELECTRONIC COMMERCE



(57) Abstract: A method and apparatus are provided for selecting the terms and conditions associated with the purchase of products and services over a network such as the Internet. The method and apparatus generate a view on a display device; displays, in the view, a graphical representation of a product or service having multiple graphical buttons associated with purchasing the product or service, wherein each button is associated with making the purchase under different terms and conditions; receives an indication that one of the buttons associated with purchasing one of the products or services has been selected; and displays the costs associated with purchasing the selected product or service in the view area according to the terms and conditions associated with the selected button.

WO 00/79417 A2

Published:

— *Without international search report and to be republished upon receipt of that report.*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

METHOD AND APPARATUS FOR USING MULTIPLE PURCHASE LEVELS IN ELECTRONIC COMMERCE

Technical Field

This invention generally relates to electronic commerce over a network and more particularly, to a method and apparatus for using multiple purchase levels in electronic commerce.

Description of the Related Art

An increasing number of businesses have developed websites on the Internet to sell their products and services. These websites allow businesses to sell many of the same products and services found in a traditional "brick and mortar" store without the overhead of leasing or purchasing real estate. In fact, by eliminating this overhead many website-based businesses are able to offer more products and services than the traditional stores. For example, the traditional software company needs large retail stores to display software products and computer systems to demonstrate software applications. In contrast, a website-based software retailer can describe a software package on a web page and demonstrate the product using several web pages or simulations. The website business may also allow the user to download the software over an Internet connection using electronic software download (ESD) methods and then purchase the software using a credit card.

The particular website design used in these businesses can greatly influence the volume of products and services sold by the business. Specifically, the website must allow a shopper to easily browse the website and selectively purchase products and services. Money used to purchase the items must be transferred securely over the Internet to make the purchaser comfortable doing business with the website-based business.

Many websites use a "shopping cart" paradigm to facilitate purchasing products and services over the Internet. The shopping cart allows a web-based shopper to identify items on a website they want to purchase as they browse through web pages on the site. Once the shopper has completed shopping, all the items in the shopping cart are checked out and the shopper pays for the items using an appropriate form of payment.

The conventional shopping cart requires the user to purchase all the items in the shopping cart once they have completed shopping on the web-site. If the user does not purchase the products or services immediately, they must repeat the shopping process the next time they decide to shop on the web-site. In most cases, users will not make such purchases immediately because they are uncertain about their purchases or may not have enough money to afford the products or services they have selected. Unfortunately, many users will visit websites to shop for products and services but may not make the purchase. More importantly, this reduces the amount of sales and reduces the profitability of a website-based business.

Accordingly, there is a need to improve the method and apparatus used to control the purchase of products and services over a network such as the Internet.

Summary of The Invention

In accordance with the present invention, as embodied and broadly described herein, a method and apparatus are provided for selecting the terms and conditions associated with the purchase of products and services over a network such as the Internet. In one aspect of the present invention, a method and apparatus generates a view on a display device; displays, in the view, a graphical representation of a product or service having multiple graphical buttons associated with purchasing the product or service, wherein each button is associated with making the purchase under different terms and conditions; receives an indication that one of the buttons associated with purchasing one of the products or services has been selected; and displays the costs associated with purchasing the selected product or service in the view area according to the terms and conditions associated with the selected button.

Brief Description of the Drawings

The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate systems and methods consistent with the invention and, together with the description, serve to explain the advantages, and principles of the invention.

In the drawings:

FIG. 1 is a block diagram depicting an exemplary electronic commerce network;

FIG. 2 is a block diagram depicting the components used in a electronic commerce server designed in accordance with one implementation of the present invention;

FIG. 3 is a block diagram depicting a shopping cart interface designed in accordance with one implementation of the present invention; and

FIG. 4 is a block diagram depicting a product unit having multiple purchase level buttons consistent with the present invention; and

FIG. 5 is a flowchart diagram depicting the steps for purchasing products and services over a network using multiple purchase levels.

Detailed Description

Overview

Systems and methods consistent with the present invention allow users to select different purchase levels for purchasing products over a network through a shopping interface. The purchase levels allow the buyer to select an item for purchase immediately, defer payment and purchase at a later date, or arrange an alternate means to purchase the item such as product or service. The shopping interface having these different purchase levels includes a graphical user interface (GUI) portion that displays GUI components on the screen and an engine portion that accesses databases having information related to the available items. Specifically, the shopping interface generates a GUI component called a product unit having multiple purchase buttons for display on the display device. Each button on the product unit corresponds to different purchase levels for purchasing the item. The purchase level includes specific terms and conditions for purchasing the product. The user views the product unit GUI components on the screen and selects the button with the most desirable terms and conditions. For example, a user may select a button labeled "Now" to purchase an item immediately or select a button labeled "Layaway" to purchase the item using the terms and conditions associated with a layaway-type sale.

Electronic Commerce System

FIG. 1 is a block diagram depicting an electronic commerce system 100 using a shopping cart interface with multiple purchase levels designed in accordance with the present invention. Electronic commerce system 100 includes a client system 102, a client

system 104, a network 106 such as the Internet, an electronic commerce server 108, an order fulfillment center 118, and a product warehouse 120. These components associated with electronic commerce system 100 provide the essential infrastructure necessary for users to purchase products and services over a network. Alternate implementations may include different components depending on the particular implementation and corresponding system requirements.

Users shopping for products or services use client system 102 and client system 104 to access electronic commerce server 108. These client systems can be personal computers, handheld devices, or subsystems in larger devices like an automobile or household appliance. A shopping interface designed in accordance with the present invention executing on these various devices facilitates the browsing, selecting, and purchasing of products and services over a network.

For example, client system 102 can be a personal computer whereby a person shops for software over a network and downloads the software onto the computer. Alternatively, client system 102 can be computer device embedded in a household appliance or industrial device having a shopping interface designed consistent with the present invention. For example, sensors connected to an embedded computer system in a refrigerator can inventory food and display the inventory results on a display device. With this information, a person can use the GUI interface generated by the shopping interface to order food over the Internet and replenish food missing from the refrigerator. Similar applications using a shopping interface consistent with present invention can be applied to ordering parts, supplies, or other items over a network.

Each client system connects to electronic commerce server 108 through network 106. Network 106 supports secure data communication suitable for sending and receiving payment information and other confidential matters. Electronic commerce server 108 can use Microsoft's Commerce Server and Internet Information Server (IIS) software to facilitate the processing of transactions, credit cards and other forms of payment. Using these software packages, network 106 can securely transmit and receive information with a secured socket layer (SSL) implemented on a TCP/IP based network. Further, network 106 can be a wireless network or a traditional terrestrial-based network based on copper or fiber-optic physical media.

Electronic commerce server 108 houses software and hardware components used to facilitate the purchase of products and services over network 106. Software and hardware in electronic commerce server 108 work with a shopping interface designed in accordance with the present invention. Depending on the application, electronic commerce server 108 may access a variety of databases for information including a product database 112, a web page storage 114, and a transaction database 116.

Product database 112 includes inventory information such as quantity, price, and availability of the products and services for sale. Product information can be generated by the party manufacturing the products. For example, a request for a product out of stock in product database 112 can automatically trigger a request for additional products directly from manufacturing facilities. The manufacturer can immediately respond within the time frame the requested product will be available for purchase. Alternatively, the manufacturer may also suggest an alternate product they have in stock for immediate delivery.

Web page storage 114 provides a storage area for the web pages used by a shopping cart interface designed in accordance with the present invention. The storage area used to store these web pages can be a database or a hierarchical file system. Typically, the web pages stored in web page storage 114 are developed using a combination of HTML, Javascript, Java, perl, and other languages compatible with electronic commerce server 108. Electronic commerce server 108 has the ability to execute procedures and functions written in these languages to generate information used for displaying web pages.

Transaction database 116 records information on transactions including customer information, past purchases, and related accounting information. Shopping interface 220 can store shipping information in transaction database 116 and retrieve the information for a subsequent purchase. Also, transaction database 116 can be used to provide status on recent purchases and availability of products.

Order fulfillment center 118 interacts with electronic commerce server 108 to facilitate the delivery of products and services from product warehouse 120. For example, order fulfillment center 118 can be a computer system configured to compress, encrypt, and deliver software through an ESD mechanism to users over network 106.

Product warehouse 120 can be a computer system capable of delivering software keys to order fulfillment center 118 that decrypt or enable operation of software. Alternatively, order fulfillment center 118 can be configured to manage the delivery of tangible products such as clothes, books, and food. Accordingly, product warehouse 120 would deliver these products to order fulfillment center 118 for packaging and delivery directly to the users making orders over network 106.

Electronic commerce system 100 can be implemented to work with multiple product warehouses having many different products and services and not a single product warehouse 120 as illustrated in FIG. 1. Further, a party selling products in product warehouse 120 may out source managing the sale of such products over network 106 to another company that implements electronic commerce system 100. That is, electronic commerce system 100 and a shopping interface consistent with the present invention can operate as a business separate from the businesses engaged in manufacturing, designing or supplying products and services to product warehouse 120.

FIG. 2 is a block diagram depicting the components used in a electronic commerce server designed in accordance with one implementation of the present invention. Specifically, electronic commerce server 108 includes a processor 202, an input-output interface 204, a display device 206, a network connection 208, memory 210, and a secondary storage 212, coupled together over an internal bus 217.

Processor 202 is a general purpose processor such as an Intel Pentium processor or an application specific integrated circuit (ASIC) designed to execute an application designed in accordance with the present invention. Input-output interface 204 is connected to a number of different peripheral devices such as a keyboard, a mouse, an external storage device, or a printer. Display device 206 is computer terminal that provides status information on electronic commerce server 108.

Network connection 208 facilitates connectivity between electronic commerce server 108 and client systems over network 106. For example, network connection 208 can transmit packetized voice and data using Ethernet and TCP/IP protocols over a high-speed optical or copper physical layer. As required, device drivers and related software used with network connection 208 are compatible with SSL and other methods of secure communication.

Memory 210 includes a run-time environment 214, a database server 216, a web server 218, and a shopping interface 220 consistent with the present invention. Run-time environment 214 facilitates execution of software processes located in memory 210 on processor 202 as discussed below. Different run-time environments 214 compatible with implementations of the present invention include real-time operating systems (RTOS) for real-time processing, UNIX-based operating systems, or Microsoft Windows. Run-time environment 214 also includes drivers and other routines necessary for operating processor 202, input-output interface 204, display device 206, and network connection 208.

Database server 216 executes on electronic commerce server 108 and provides access to databases having information used by shopping interface 220. Specifically, database server 216 may access local information stored in a database on secondary storage 212 or may access information stored remotely over a network on another computer system. Generally, applications such as shopping interface 220 will access database information through database server 216 using an application programming interface (API). For example, shopping interface 220 can access databases such as transaction database 116 using commands compatible with a structured query language (SQL) API.

Web server 218 executes on electronic commerce server 108 and services requests for web pages received from client systems 102 and 104. In operation, web server 218 processes web page requests and corresponding parameters such as those contained in uniform resource locators (URL), and retrieves the appropriate web pages from web page storage 114. Parameters are used to access the database with information on the product or service being purchased. Web server 218 transmits this product and service information from the database along with the requested web page back to one of the client systems where it is displayed by shopping interface 220 on a display device. For example, a user may request the price of a particular product being sold through electronic commerce server 108. Web server 218 will extract pricing information from product database 112 and combine the pricing information for use in the web page sent back to a particular client system.

Shopping interface 220 provides information stored in various databases to users shopping over a network. In one implementation of the present invention, these databases include product database 112, transaction database 114, and web page storage 116. Alternate implementation of the invention may include additional databases or fewer databases as required by the particular implementation.

Multiple purchase levels can be integrated into shopping interface 220. Shopping interface 220 is one exemplary interface that uses multiple purchase levels in addition to improved searching and purchase tracking features. Shopping interface 220 facilitates the browsing, selection, and purchase of products and services over a network. In particular, shopping interface 220 allows a user to easily search a large database of products and/or services and purchase them over a network. The design of shopping interface 220 enables a person shopping for these products and services to track all costs for purchasing the various items including shipping, handling, tax, and purchase price. Shopping interface 220 consistent with the invention can be developed using a combination of object-oriented programming languages such as Java, hypertext markup language (HTML), shell scripts appropriate to the particular operating system (e.g., shell scripts may include bsh, csh, ksh, and perl), and other languages such as Javascript. In addition, database programming languages such as SQL can also be used to access data stored in various databases.

Exemplary Shopping Interface

FIG. 3 is a block diagram depicting the view generated by shopping interface 220 designed consistent with the present invention. Shopping interface 220 includes a graphical user interface (GUI) portion that displays GUI components on the display screen and an engine portion that accesses databases containing information associated the available products and services. Specifically, shopping interface 220 generates GUI components in several distinct areas of the display screen to provide information on the products and services, and receive requests for purchasing the same. Shopping interface 220 presents the combined information in these distinct areas to the user simultaneously.

One area of the display includes a finder area 302. Shopping interface 220 generates GUI components in finder area 302 to collect parameters used by the engine portion of shopping interface 220 to search for specific products and services. The

complexity of the GUI components displayed in finder area 302 and corresponding searches depend on the number of products and services offered for sale. If the number of products and services are few, finder area 302 may only require a simple check list or pull-down menu listing the products available for sale. In contrast, a larger number of products can require more complex search tools.

Finder area 302 in FIG. 3 can be used to search through a large number of products and services. For example, finder area 302 in FIG. 3 includes a free-form search GUI component 309 to search by keywords and a descriptive GUI search component 311 to search using descriptions. Free-form search GUI component 309 allows a person to enter keywords associated with some aspect of the product or service they area interested in purchasing. The keyword is a specific word unique to a particular product. Free-form search GUI component 309 can be used to compare keywords with information the manufacturer has included in the title of the product or placed on the package of the product. This may include information such as the specific name of a product (e.g., "Crock pot"), the manufacturer of the product (e.g., "Revere"), and measurements associated with the product (e.g., 16 quarts). Consequently, free-form search GUI component 309 works well when a person knows specific words associated with a product or service they are interested in purchasing.

In contrast, descriptive GUI search component 311 searches for products based on a product description. Descriptive GUI search component 311 searches for products and services based on categories of information and not specific keywords as required in free-form search tool 309. In one implementation, descriptive search GUI component 311 includes a product type field 310, an action type field 312, and a subject type field 314. These fields can include a series of predetermined categories entered in pull-down menus or may be designed to receive categories entered by a user.

Within descriptive search GUI component 311, product type field 310 includes a list of distinct product types offered on the website. The specific product types depends on the type of products being sold. For example, a website selling computers and related products may include categories such as software, hardware, books, and computer courses. The product type field 310 specifically helps a person shop for types of products without having to know specific keywords associated with the particular product.

Descriptive GUI search component 311 includes action type field 312 to allow the user to limit the type of information when browsing. The possible actions offered in action type field 312 depends on the product type field 310 selected above. This helps a person focus on specific items and narrow down the choices for products and services on the website. For example, if product type field 310 includes computer software then action type field 312 may include a limitation that selects products that run on a Macintosh or a Windows-based personal computer. Action type field 312 can identify products that are on-sale, newly released, or have any other action.

Descriptive search GUI component 311 includes subject type field 314 to allow a user to describe a more specific characteristic of product type as limited by action type field 312. Together product type field 310 and action type field 312 limit the specific characteristics available in subject type field 314. In some cases, subject type field 314 may only describe the purpose of a product. For example, subject type field 314 can include categories for cooking food, repairing automobiles, or building homes. Product type 310 would determine whether the user would see software, books, or videos on these topics while action type 312 would determine if these products are for helping a person learn about these subjects, teach these subjects, develop a career in these subjects, or take other actions in these areas.

The combination of product type field 310, action type field 312, and subject type field 314 are combined to form a complete query. A descriptive search could search for "Software" (i.e., a product type) "that helps me" (i.e., an action type) "plan meals" (i.e., a subject type). If the number of selections available in subject type field 314 are too numerous, the subject type field 314 can be text-entry box the user enters attributes of the product. Alternatively, if the number of subjects are fewer in number then a pull-down menu can be used to provide the choices.

Results from the search based on information in finder area 302 generates product units for display in viewer area 304. A product unit GUI component is a visual symbolic representation of a product or service. Initially, the product units matching the search are displayed in the upper portion of viewer area 304 along with a brief description. For example, in FIG. 3 viewer area 304 includes a product unit GUI component 316 for product E having basic description 322 and a product unit GUI component 318 for

product F having basic description 324. The items displayed in the upper portion of viewer area 304 can be scrolled using a scroller as illustrated.

Shopping interface 220 provides a more detailed description when a user selects a product unit in this upper region of viewer area 304. For example, shopping interface 220 displays detailed information 326 on product E when product unit GUI component 316 is selected. Detailed information 326 can include information describing the price, current availability of the product or service, and terms and conditions associated with purchasing the product or service using one of the multiple purchase levels discussed below.

Specifically, a user can indicate an interest in purchasing a product or service by selecting one of the multiple purchase levels displayed in the product unit. For example, product unit GUI components displayed in viewer area 304 allow the user to select either the "Now" or "Later" buttons to purchase the product. The "Now" button indicates that the person would like to purchase the product immediately while the "Later" button means the person is interested in purchasing the product but not immediately. Selecting either button, however, places the product unit in keeper area 306 and indicates that the user shopping is interested in purchasing the product or service.

Keeper area 306 allows users to see items they are interested in purchasing in a product display area 328 and the related aggregate costs associated with purchasing the products or services in a totals area 330. The user has the ability to include products selected for immediate purchase in the aggregate costs as well as products selected for purchase at a later time.

Product display area 328 holds a product unit for each product or service selected until it is purchased. Each product unit remains in product display area 328 until a user actually purchases item or removes the item from product display 328. This feature permits the user to view the selections during every visit to the website. The items within product display area 328 can be scrolled using a scroll bar as illustrated.

For example, if a user selects the "Now" button on product unit 329 and selects the "Check Out" button in totals area 330, then the shopper purchases "Product C" and product unit 329 is removed from product display area 328. However, if a user selects the "Later" button on product unit 329, the user does not intend to purchase the product

unit a later date and product unit 329 is not removed from product display area 328 even when the "Check Out" button is selected.

Totals area 330 keeps track of the aggregate costs associated with selected products in product display area 328. Specifically, the total value in totals area 330 reflects the purchase price, shipping costs, and taxes associated with product units in product display area 328 having the "Now" button selected. Products units having the "Later" button selected are not included in the total value in totals area 330. These particular product units are excluded from the calculation because they are not going to be purchased immediately. In an alternative implementation, a user may also include products designated for purchase "Later" in the aggregate costs provided in area 330.

In operation, totals area 330 is not scrolled like product display area 328 within keeper area 306. This ensures that the aggregate costs associated with purchasing the products or services is always present and available to the person shopping on the website. Alternate implementations may allow the totals area 330 to scroll if the user wants scrolling or if the entries in totals area 330 requires scrolling to view the various costs.

Product Units With Multiple Purchase Levels

FIG. 4 is a block diagram of a product unit having multiple purchase levels consistent with one implementation of the present invention. Product unit 400 includes several exemplary purchase levels for people purchasing product E over a network such as the Internet. The purchase levels associated with product unit 400 can be selected using a "Now" button 402 for an immediate purchase, a "Later" button 404 for a deferred purchase, a " Layaway" button 406 for a down payment/defer purchase, and "Bid" button 408 to make a bid on a product or service.

These exemplary purchase levels associated with product unit 400 allow a person to purchase products and services using different terms and conditions. Now button 402 is used when a person wants to buy a product or service immediately. Later button 404 allows a person to select an item for purchase but not purchase the item until a subsequent point in time. Layaway button 406 allows a person to make a down payment and also delay purchasing the product or service for a time period. Bid button 408 allows a person to make a bid on a product or service they believe should be priced either higher

or lower than the listed price. In addition to these purchase methods, additional purchase buttons are contemplated that tailor the purchase method to the needs of a user or a group of users. By tailoring the purchase methods using multiple purchase levels, a wider range of users are more likely to engage in electronic commerce and thus increase sales. Further, although a product unit is illustrated in FIG. 4 with the purchase levels, other software components other than the specific product unit can be designed to work with multiple purchase levels.

Each purchase level can be setup ahead of time to include a variety of terms and conditions for each purchase. These terms and condition can take into account increased risks involved in a transaction, costs of extending credit to a buyer, or costs associated with reserving a product or service in inventory. For example, a person can purchase a product or service immediately for $100.00 by selecting Now button 402 or pay $120.00 to defer payment to a later point in time using Later button 404. Layaway button 406 may offer to sell the same product or service at $100.00 but may make the deposit non-refundable after a certain time period has elapsed. In general, the purchase methods include terms and conditions commonly used in private and commercial transactions.

FIG. 5 is a flowchart diagram depicting the steps for purchasing products and services over a network using multiple purchase levels. Initially, shopping interface 220 displays multiple purchase levels on shopping interface to purchase products/services (step 502). This may require establishing a communication session between a client computer system displaying shopping interface 220 and electronic commerce server 108 where the various purchase information is kept.

One purchase level on shopping interface 220 indicates that a product or service should be purchased immediately (step 504). For example, a user can indicate that they want to purchase a product or service immediately by selecting Now button 404 in FIG. 4. Making this selection, stores the selected product or service into keeper area 306 illustrated in FIG. 3 (step 506). The product or service is then marked for immediate purchase the next time the user checks out products or services on shopping interface (step 508). Shopping interface 220 may also access databases associated with electronic commerce server 108 to store information on the terms and conditions of the potential purchase. A person shopping over a network can select numerous products and services

for immediate purchase in this manner. Once the user has completed shopping on the website, the products and services are processed for immediate purchase (step 510).

Another purchase level on shopping interface 220 indicates that a product or service should be purchased using a layaway-type sale (step 512). The layaway stores the selected product or service in keeper 306 in FIG. 3 (step 522) and requires a layaway deposit to make the product or service a layaway item (step 524). Preferably, the layaway is a non-refundable deposit made towards the purchase of a specific product or service. Once the layaway deposit is made, a reservation in the inventory is made to purchase the selected product at a later point in time (step 526). Alternatively, specific inventory may not be reserved for the particular layaway item depending how the terms and conditions associated with a layaway is described. The layaway item remains in keeper 306 until shopping interface receives an indication to purchase the selected item for immediate purchase (step 528).

Yet another purchase level on shopping interface 214 indicates that a product or service should be purchased at a later time (step 514). This indication stores the selected product or service in keeper 306 in FIG. 3 (step 516) but does not make a reservation in the inventory to purchase the selected product or service at a later point in time. The user making this type of purchase can not be certain the product will be in stock and available at the advertised price when they decide to buy. This item remains in keeper 306 until shopping interface receives an indication to purchase the selected item for immediate purchase (step 520).

In each of the three purchase levels outline above, shopping interface 220 can be configured to display costs associated with products or services selected for purchase. In some cases, shopping interface 220 only displays the costs associated with purchasing a product or service for immediate sale. Alternatively, shopping interface 220 can display the price associated with purchasing products or services selected on a layaway or for a later purchase.

While specific embodiments have been described herein for purposes of illustration, various modifications may be made without departing from the spirit and scope of the invention. Further, although aspects of the present invention are described as being stored in memory and other storage mediums, one skilled in the art will

appreciate that these aspects of the present invention can also be stored on or read from other types of computer-readable media, such as secondary storage devices, like hard disks, floppy disks, or CD-ROM; a carrier wave from the Internet, or other forms of RAM. Accordingly, the invention is not limited to the above described embodiments, but instead is defined by the appended claims in light of their full scope of equivalents.

Claims

1. A method, performed on a processor, of selecting the terms and conditions associated with the purchase of products and services over a network, comprising:

establishing a communication session between a client computer system having a display device and an electronic commerce server computer over a network;

generating a view on the display device having a first area and a second area displayed simultaneously on the display device;

displaying a graphical representation of a product or service in the first area having multiple graphical buttons associated with purchasing the product or service, wherein each button is associated with purchasing the product or service under different terms or conditions;

receiving an indication that one of the buttons associated with purchasing one of the products or services has been selected;

displaying the graphical representation of the product or service in the second area of the display indicating that the product has been selected for purchase;

notifying the electronic commerce server of the terms and conditions under which the product or service has been selected for purchase;

determining the cost to purchase the selected product or server according to the terms and conditions associated with the selected button; and

displaying the costs associated with purchasing the selected product or service in the second area of the display under the associated terms and conditions.

2. The method of claim 1 wherein the displaying step only displays the cost of a selected product or service when the terms and conditions indicate that the purchase is being made immediately.

3. A method, performed on a processor, of selecting the terms and conditions associated with the purchase of products and services over a network, comprising:

generating a view on a display device;

displaying, in the view, a graphical representation of a product or service having multiple graphical buttons associated with purchasing the product or service, wherein each button is associated with making the purchase under different terms or conditions;

receiving an indication that one of the buttons associated with purchasing one of the products or services has been selected; and

displaying the costs associated with purchasing the selected product or service in the view area according to the terms and conditions associated with the selected button.

4. The method of claim 3 wherein the displaying step only displays the cost of a selected product or service when the terms and conditions indicate that the purchase is being made immediately.

5. The method of claim 3 further comprising:

establishing a communication session between a client computer system having the display device and an electronic commerce server computer over a network.

6. The method of claim 5 further comprising:

notifying the electronic commerce server of the terms and conditions under which the product or service has been selected for purchase.

7. An apparatus for selecting the terms and conditions associated with the purchase of products and services over a network, comprising:

means for generating a view on a display device;

means for displaying, in the view, a graphical representation of a product or service having multiple graphical buttons associated with purchasing the product or service, wherein each button is associated with making the purchase under different terms or conditions;

means for receiving an indication that one of the buttons associated with purchasing one of the products or services has been selected; and

means for displaying the costs associated with purchasing the selected product or service in the view area according to the terms and conditions associated with the selected button.

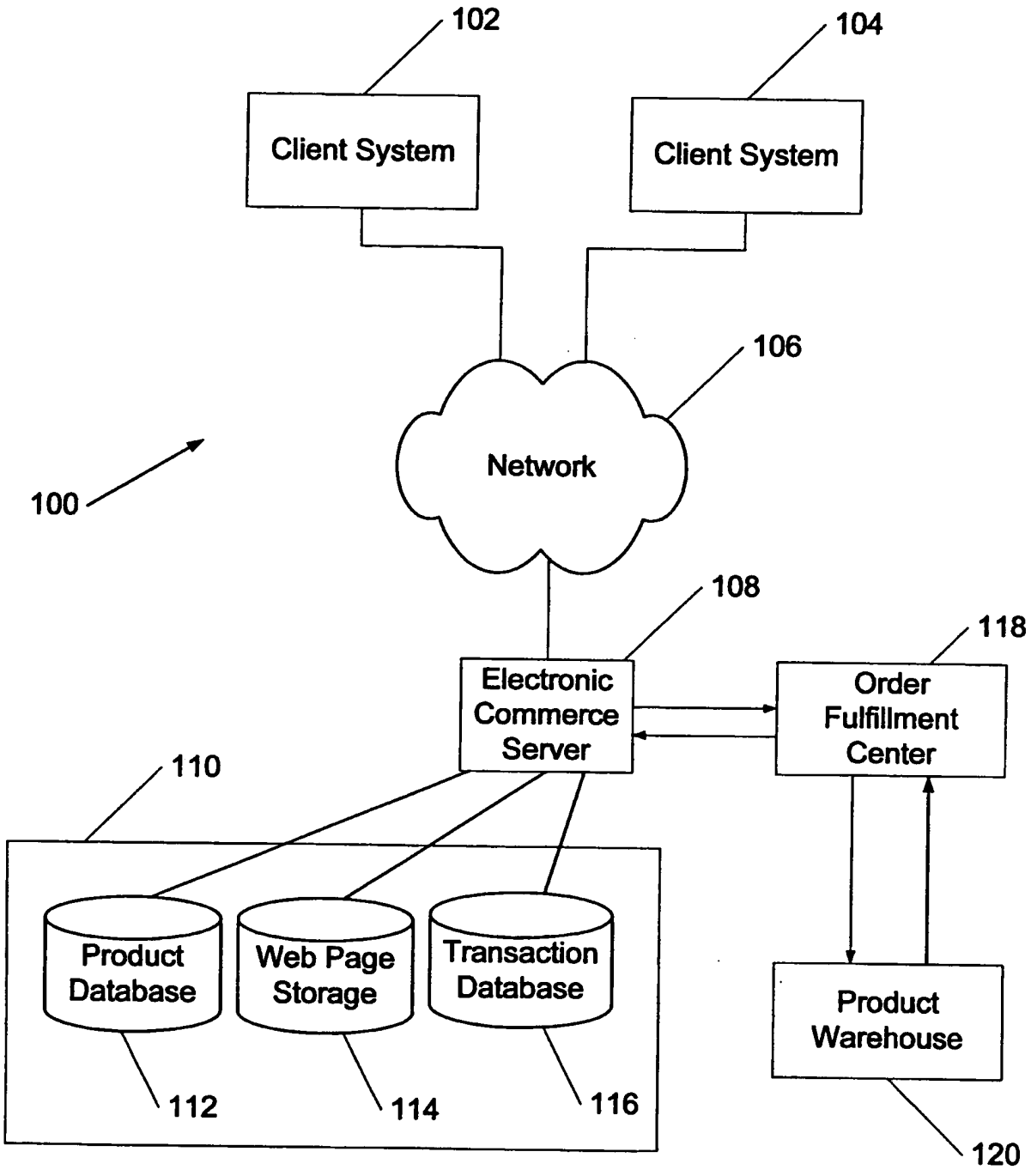

102
104
Client System
Client System
106
Network
100
108
118
Electronic Commerce Server
Order Fulfillment Center
110
Product Database
Web Page Storage
Transaction Database
Product Warehouse
112
114
116
120

FIG. 1

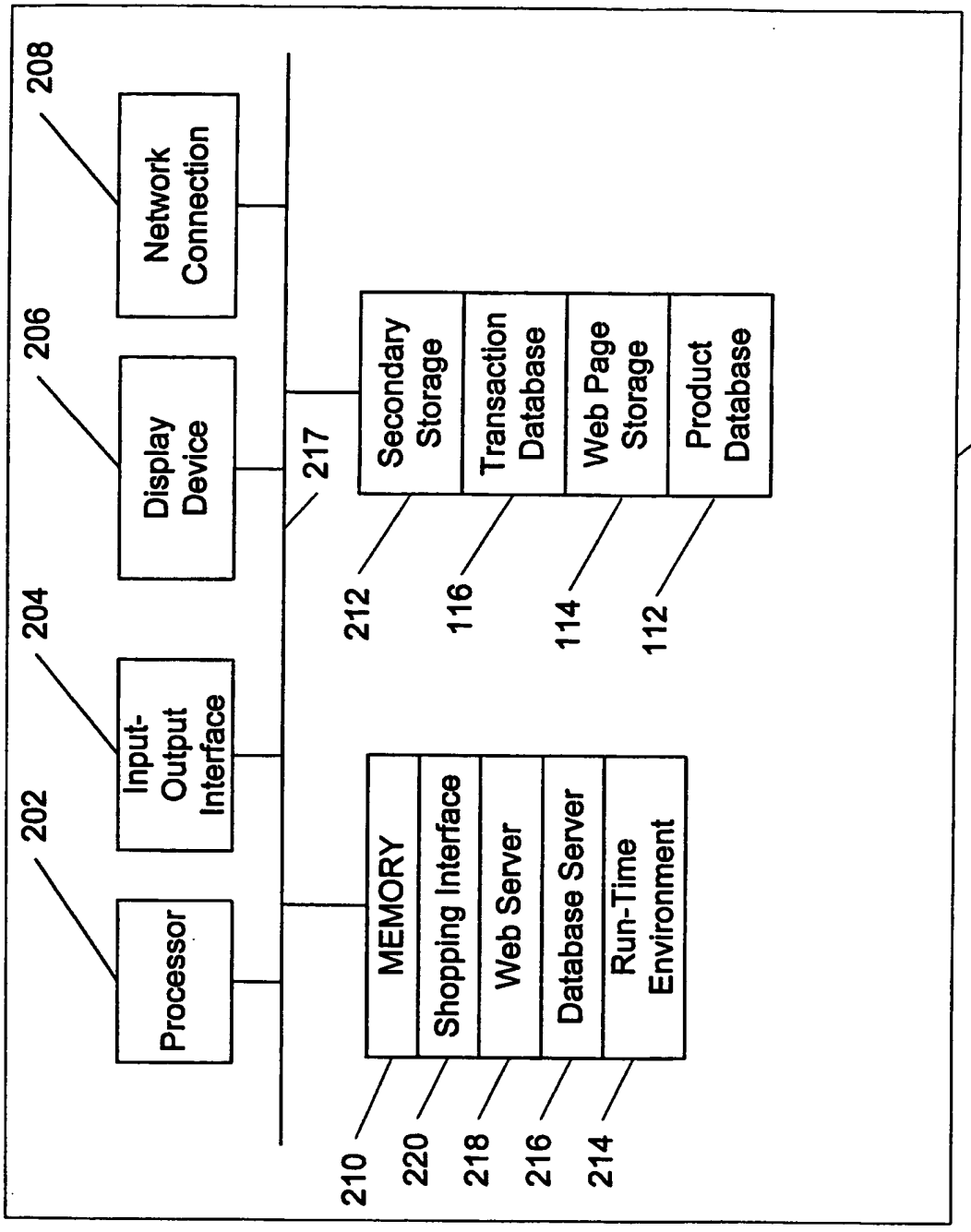

208
Network Connection
206
Display Device
204
Input-Output Interface
202
Processor
217
Secondary Storage
Transaction Database
Web Page Storage
Product Database
212
116
114
112
MEMORY
Shopping Interface
Web Server
Database Server
Run-Time Environment
210
220
218
216
214
108

FIG. 2

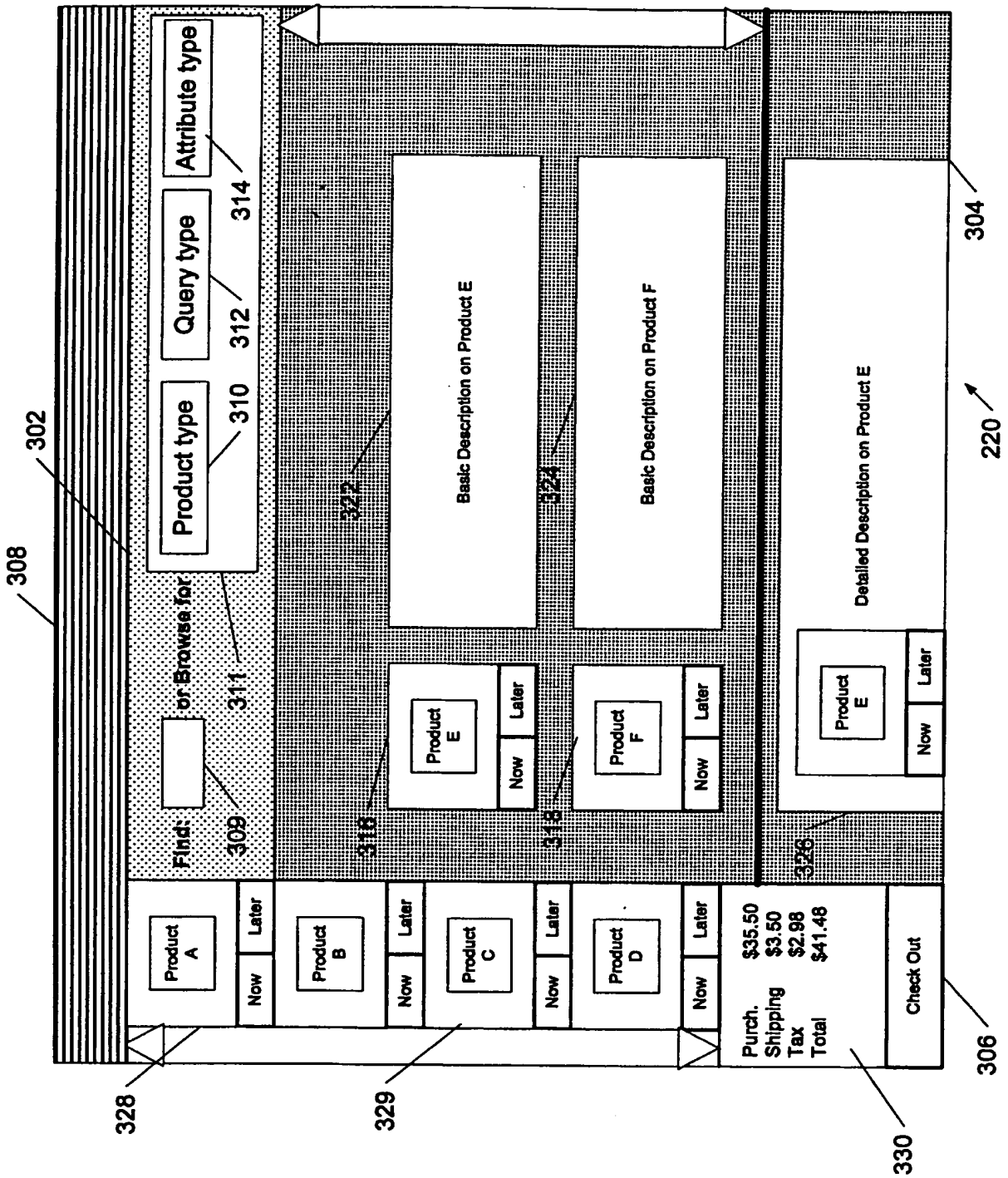

Attribute type
Query type
Product type
or Browse for
Find:
Basic Description on Product E
Basic Description on Product F
Detailed Description on Product E
Product A
Product B
Product C
Product D
Product E
Product F
Now
Later
Purch. $35.50
Shipping $3.50
Tax $2.98
Total $41.48
Check Out
302
304
306
308
310
311
312
314
316
318
320
322
324
326
328
329
330

FIG. 3

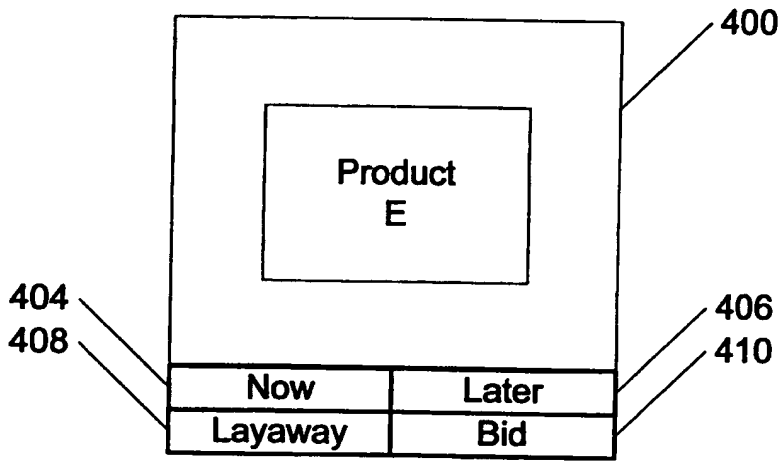


FIG. 4

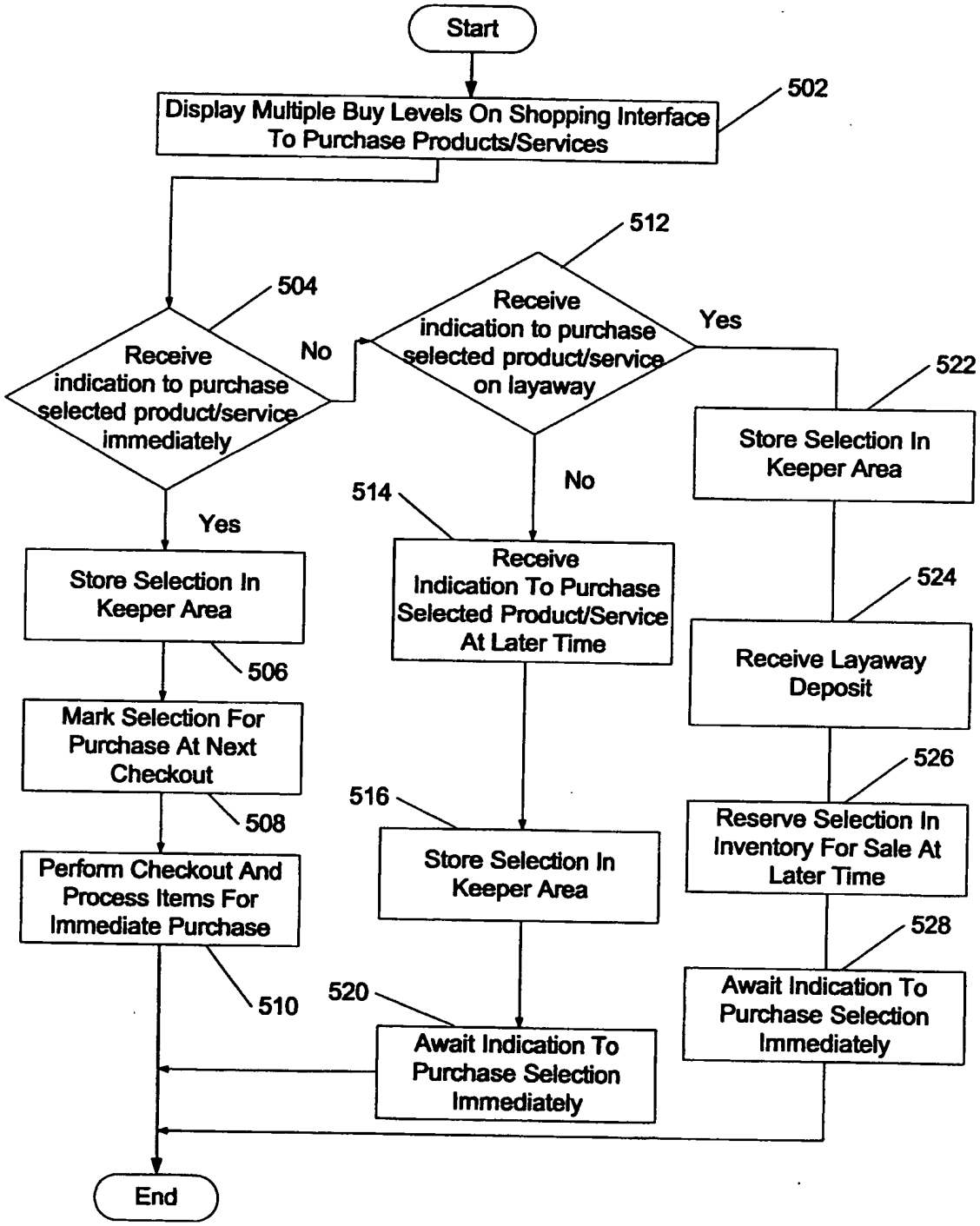

Start
Display Multiple Buy Levels On Shopping Interface To Purchase Products/Services
502
Receive indication to purchase selected product/service immediately
504
No
Yes
Receive indication to purchase selected product/service on layaway
512
Yes
No
Store Selection In Keeper Area
506
Mark Selection For Purchase At Next Checkout
508
Perform Checkout And Process Items For Immediate Purchase
510
Receive Indication To Purchase Selected Product/Service At Later Time
514
Store Selection In Keeper Area
516
Await Indication To Purchase Selection Immediately
520
Store Selection In Keeper Area
522
Receive Layaway Deposit
524
Reserve Selection In Inventory For Sale At Later Time
526
Await Indication To Purchase Selection Immediately
528
End

FIG. 5